

2) met en ligne $P_{A_0} + P_{A_1}$

~~XXXXXXXXXX~~

conservé A_0, A_1

```

XADDP: TST.L (A0)
        BNE KC16
        CMP # $4000, 4(A0)
        BNE KC16
        EXG A0, A1
        BSR XPSAP
        EXG A0, A1
        RTS

```

→

↓

somme = A0

```

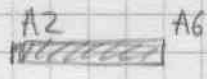
KC16: TST.L (A1)
        BNE KC17
        CMP # $4000, 4(A1)
        BEQ XPSAP

```

→ $4(A1) = 0$

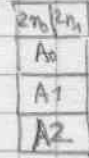
↓
KC17

② met en libre P_{A0} + P_{A1}
 cas P_{A0} ≠ 0
 P_{A1} ≠ 0



```

KC17: MOVE.L A6, A2
      MOVEM.L A0-A2, -(SP)
      MOVE (A0)+, D0
      MOVE (A1)+, D1
      CLR D2
      ADDQ #2, A6
  
```



```

      MOVE D0, D2
      SWAP D2
      MOVE D1, D2
      ADD.L D2, D2
      MOVE.L D2, -(SP)
  
```

met les variables communes
 nb = D2
 bit 0 ∈ P_{A0}
 1 ∈ P_{A1}

```

KC18: TST D0
      BNE KC21
  
```

```

KC19: TST D1
      BEQ KC25
  
```

```

KC20: SUBQ #1, D1
      ADDQ #2, A1
KC21: MOVE #2, (A6)+
  
```

```

      BRA KC18
KC175: MOVE #1, (A6)+
KC176: SUBQ #1, D0
      ADDQ #2, A0
KC177: ADDQ #1, D2
      → fin
  
```

```

      BRA KC177
  
```

```

KC21: TST D1
      BEQ KC175
  
```

→ var de P_{A0} seul
 met P_{A0} seul

```

KC22: MOVE (A0), D3
      CMP (A1), D3
      BCS KC175
      BNE KC20
  
```

met variable commune

```

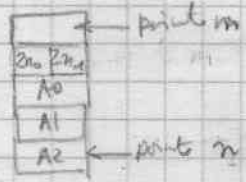
      MOVE #3, (A6)+
  
```

```

      SUBQ #1, D1
      ADDQ #2, A1
      BRA KC176
  
```

```

KC25: MOVE D2, (A2)
      MOVE.L A6, -(SP)
  
```



2

```

MOVE (A0)+, D4
MOVE (A1)+, D5
MOVEQ #-1, D6
ADDQ #2, A6

```

} nombre de monomes - 1

```

KC26: MOVE.L 16(SP), A2
      MOVE (A2)+, D2
      SUBQ #1, A2
      TST D4
      BPL KC34
      TST D5
      BMI KC62

```

→ fin

met monome = celui de PA1

```

KC28: SUBQ #1, D5
      ADDQ #1, D6

```

```

KC29: SUBQ #1, D2
      BMI KC32
      ADDQ #2, A2
      BTST #1, (A2)
      BEQ KC30
      MOVE (A1)+, (A6)+
      BEQ KC29
      BSET #2, (A2)
      BRA KC29

```

```

KC30: CLR (A6)+
      BRA KC29

```

```

KC32: EXG A0, A1
      BSR XPOSE
      MOVE.L A1, A0
      MOVE.L A0, A1
      BRA KC26

```


KC34: TST D5

BPL KC44

met monome = celui de P_{A0}

le p_{A0} KC28

KC38: SUBQ #1, D4

ADDQ #1, D6

KC39: SUBQ #1, D2

BMI KC42

ADDQ #2, A2

BTST #0, (A2)

BEQ KC40

MOVE (A0)+, (A6)+

BEQ KC39

BSET #2, (A2)

BRA KC39

KC40: CLR (A6)+

BRA KC39

KC42: BSR XPOSE

MOVE.L A4, A0

BRA KC26

KC44: MOVE.L A0, A3

MOVE.L A1, A2

MOVE.L A2, A5

MOVE D2, D3

determine le 1^{er} monome

KC46: SUBQ #1, D3

BMI KC52

ADDQ #2, A5

MOVE.B (A5), D0

BTST #0, D0

BNE KC48

cas variable de A1

TST (A4)+

BEQ KC46

BRA KC28

KC48: BTST #1, D0

BNE KC50

cas variable de A0

TST (A3)+

BEQ KC46

BRA KC38

→ m. exposant

KC50: CPM (A3)+, (A4)+

BCS	KC38	→ mettre A0	} ⊗
BNE	KC28	→ mettre A1	
BRA	KC46		

KC52: MOVEM 4(SP), D0/D1

MOVEM.L A0/A2/A6/D2/D4-D6, -(SP)
 ← MOVE D2/D4-D6, -(SP)

ADD D2, A6
 ADD D2, A6
 ADD D0, A0
 ADD D1, A1

← MOVEM.L A0/A1, -(SP)

BSR XADDS2

MOVE (A2), D0 ← MOVEM.L (SP)+, A0/A1/A4

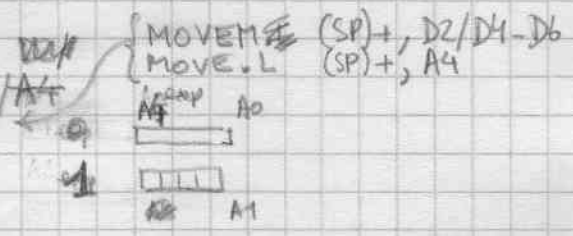
MOVEM.L (SP)+, A2/A3/D2/D4-D6

CMP #4000, D0

BNE KC56

cas d'attente nulle

MOVE.L A3, A6



KC54: LONG A0, D0 BSR SLNG0

ADD D0, A0

LONG A1, D1 BSR SLNG1

ADD D1, A1

SUBQ #1, D1

SUBQ #1, D5

BRA KC26

KC56: ADDQ #1, D6

MOVE.L A4, A0

```

KCS9: SUBQ #1, D2
      BMI   KC54
      ADDQ  #2, A2
      BTST  #0, (A2)
      BEQ   KC60
      MOVE  (A0)+, (A3)+
      BEQ   KC59
      BSET  #2, (A2)
      BRA   KC59

```

```

KC60: CLR  (A3)+
      BRA  KC59

```

```

KC62: TST  D6
      BPL  KC64
      cas polyn nul
      ADDQ #8, SP
      MOVEM.L (SP)+, A0/A1/A6
      BRA  XPSP0

```

```

KC64: MOVEM.L (SP)+, A3
      MOVE  D6, (A3)+
      ADDQ  #4, SP
      MOVEM.L (SP), A0/A1/A2
      ADDQ  #2, A0
      ADDQ  #2, A1
      MOVE.L A6, A4
      MOVE.L A2, A5
      MOVE  (A2)+, D2

```

nb de mot = 1

```

KC69: SUBQ #1, D2
      BMI   KC74
      MOVE  (A5)+, D0
      BTST  #0, D0
      BEQ   KC70
      MOVE  (A0)+, D1

```

```

KC70: BTST  #1, D0
      BEQ   KC71
      MOVE  (A0)+, D1

```

```

KC71: BTST  #2, D0
      BNE  KC72
      CLR  D1
      ADDQ #1, D3
      BRA  KC69

```

← (CLR D3
MOVE.L A2, A5) ⊗

⊗

KC72: MOVE D1, (A2)+

~~KC74: MOVE.L (SP)+, A0~~

KC75: TST D3

BEQ KC84

ST (A4)

MOVE.L (SP), A5

MOVE (A5), D2 *ancien nb de variables*

SUB D3, (A5)

~~MOVE (A3), D4~~ *D6 = nb de mon - 1*

MOVE D6, (A2)+

KC76: MOVE.L A6, A4

MOVE D2, D3

MOVE (A4)+, D5

KC78: SUBQ #1, D3

BMI KC81

CMP D3, D5

BNE KC79

ADDQ #2, A3

MOVE (A4)+, D5

BRA KC78

KC79: MOVE (A3)+, (A2)+

BRA KC78

KC81: LONG A3, D0 *BSR SLNG 30*

ASR #1, D0

SUBQ #1, D0

KC82: MOVE (A3)+, (A2)+

DBRA D0, KC82

DBRA D6, KC76

MOVE.L A2, A6

KC84: MOVE.L (SP)+, A2

RTS

~~KC74~~

KC74: MOVE.M.L (SP)+, A0/A1

~~MOVE.L (SP), A5~~

→ RTS

Suppression des exposants nuls

réduction du nb de variables

